

Preliminary Amendment filed February 6, 2007

Abstract

The present invention relates to arrangement and method for manufacturing a PET bottle having a handle formed on a body by a continuous process by means of an injection blow molding method, and a PET bottle manufactured thereby. The arrangement comprises a preform blow mold for blowing air into a preform to expand the preform in a predetermined ratio to a complete shape so as to allow a handle section to be compressed, a blow mold having a handle forming portion for compressing both sides of the bottle to form the handle section, a cutting mold including a mold punch for cutting off a compressed portion of the handle section compressed by the handle forming portion, a bonding apparatus for bonding the compressed portion of the handle section compressed by the handle forming portion or a cut-off portion remaining in the handle section after cutting off the compressed portion of the handle section by means of the cutting mold, and a conveyer for conveying the preform or the molded PET bottle while clamping a neck of the preform or a neck of the molded PET bottle. The method comprises the steps of performing a first blowing operation to blow compressed air into a preform manufactured by injection molding in order to form a first hollow PET container after mounting the preform to a preform blow mold, performing a second blowing operation to blow compressed air into the first PET container in order to form a second PET container having a handle section formed on a predetermined area of a body after mounting the first PET container to a blow mold having a handle forming portion, cutting off a compressed portion of the handle section of the second PET container in order to form a third PET container, and bonding a cut-off portion of the handle section of the third PET container remaining after the step c) in order to form a fourth PET container. The PET bottle having the handle formed on the body is formed by use of the above arrangement and method.